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Equations CC-1 or CC-2 of this subpart) as measured by the applicable method in §98.294(b) or (c) for each month (percent by weight expressed as a decimal fraction).

- (8) Whether CO_2 emissions for each manufacturing line were calculated using a trona input method as described in Equation CC-1 of this subpart, a soda ash output method as described in Equation CC-2 of this subpart, or a site-specific emission factor method as described in Equations CC-3 through CC-5 of this subpart.
- (9) Number of manufacturing lines located used to produce soda ash.
- (10) If you produce soda ash using the liquid alkaline feedstock process and use the site-specific emission factor method (§98.293(b)(3)) to estimate emissions then you must report the following relevant information:
- (i) Stack gas volumetric flow rate per minute (dscfm)
- (ii) Hourly CO_2 concentration (percent CO_2)
- (iii) CO₂ emission factor (metric tons CO₂/metric tons of process vent flow from mine water stripper/evaporator).
- (iv) CO_2 mass emission rate (metric tons/hour).
- (v) Average process vent flow from mine water stripper/evaporater during performance test (pounds/hour).
- (vi) Annual process vent flow rate from mine stripper/evaporator (thousand pounds/hour).
- (vii) Annual operating hours for each manufacturing line used to produce soda ash using liquid alkaline feed-stock (hours).
- (11) Number of times missing data procedures were used and for which parameter as specified in this paragraph (b)(11):
- (i) Trona or soda ash (number of months).
- (ii) Inorganic carbon contents of trona or soda ash (weeks).
- (iii) Process vent flow rate from mine water stripper/evaporator (number of months).
- (iv) Stack gas volumetric flow rate during performance test (number of times)
- (v) Hourly CO_2 concentration (number of times).
- (vi) Average vent process vent flow rate from mine stripper/evaporator

during performance test (number of times).

§ 98.297 Records that must be retained.

In addition to the records required by \$98.3(g), you must retain the records specified in paragraphs (a) and (b) of this section for each soda ash manufacturing line.

- (a) If a CEMS is used to measure CO_2 emissions, then you must retain under this subpart the records required for the Tier 4 Calculation Methodology specified in subpart C of this part and the information listed in this paragraph (a):
- (1) Monthly production of soda ash (tons)
- (2) Monthly consumption of trona or liquid alkaline feedstock (tons)
 - (3) Annual operating hours (hours).
- (b) If a CEMS is not used to measure emissions, then you must retain records for the information listed in this paragraph (b):
- (1) Records of all analyses and calculations conducted for determining all reported data as listed in §98.296(b).
- (2) If using Equation CC-1 or CC-2 of this subpart, weekly inorganic carbon content factor of trona or soda ash, depending on method chosen, as measured by the applicable method in §98.294(b) (percent by weight expressed as a decimal fraction).
- (3) Annual operating hours for each manufacturing line used to produce soda ash (hours).
- (4) You must document the procedures used to ensure the accuracy of the monthly trona consumption or soda ash production measurements including, but not limited to, calibration of weighing equipment and other measurement devices. The estimated accuracy of measurements made with these devices must also be recorded, and the technical basis for these estimates must be provided.
- (5) If you produce soda ash using the liquid alkaline feedstock process and use the site-specific emission factor method to estimate emissions (§98.293(b)(3)) then you must also retain the following relevant information:
- (i) Records of performance test results.

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(ii) You must document the procedures used to ensure the accuracy of the annual average vent flow measurements including, but not limited to, calibration of flow rate meters and other measurement devices. The estimated accuracy of measurements made with these devices must also be recorded, and the technical basis for these estimates must be provided.

§98.298 Definitions.

All terms used in this subpart have the same meaning given in the Clean Air Act and subpart A of this part.

Subpart DD [Reserved]

Subpart EE—Titanium Dioxide Production

§98.310 Definition of the source category.

The titanium dioxide production source category consists of facilities that use the chloride process to produce titanium dioxide.

§98.311 Reporting threshold.

You must report GHG emissions under this subpart if your facility contains a titanium dioxide production process and the facility meets the requirements of either §98.2(a)(1) or (a)(2).

§98.312 GHGs to report.

(a) You must report CO_2 process emissions from each chloride process line as required in this subpart.

(b) You must report CO_2 , CH_4 , and N_2O emissions from each stationary combustion unit under subpart C of this part (General Stationary Fuel Combustion Sources) by following the requirements of subpart C.

§ 98.313 Calculating GHG emissions.

You must calculate and report the annual process CO_2 emissions for each chloride process line using the proce-

dures in either paragraph (a) or (b) of this section.

(a) Calculate and report under this subpart the process CO₂ emissions by operating and maintaining a CEMS according to the Tier 4 Calculation Methodology specified in \$98.33(a)(4) and all associated requirements for Tier 4 in subpart C of this part (General Stationary Fuel Combustion Sources).

(b) Calculate and report under this subpart the annual process CO2 emissions for each chloride process line by determining the mass of calcined petroleum coke consumed in each line as specified in paragraphs (b)(1) through (b)(3) of this section. Use Equation EE-1 of this section to calulate annual combined process CO2 emissions from all process lines and use Equation EE-2 of this section to calculate annual process CO₂ emissions for each process line. If your facility generates carboncontaining waste, use Equation EE-3 of this section to estimate the annual quantity of carbon-containing waste generated and its carbon contents according to §98.314(e) and (f):

(1) You must calculate the annual CO_2 process emissions from all process lines at the facility using Equation EE-1 of this section:

$$CO_2 = \sum_{p=1}^{m} E_p$$
 (Eq. EE-1)

Where

CO₂ = Annual CO₂ emissions from titanium dioxide production facility (metric tons/year).

 E_p = Annual CO_2 emissions from chloride process line p (metric tons), determined using Equation EE-2 of this section.

p = Process line.

m = Number of separate chloride process lines located at the facility.

(2) You must calculate the annual CO_2 process emissions from each process lines at the facility using Equation EE-2 of this section:

$$E_p = \sum_{n=1}^{12} \frac{44}{12} * C_{p,n} * \frac{2000}{2205} * CCF_n$$
 (Eq. EE-2)